



Alaska Department of Transportation and Public Facilities

Clean Water Act Consent Decree

Part III Compliance Program

2012 Annual Report

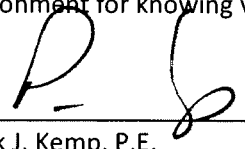
March 2013

Commissioner's Certification

I certify that in the 2012 reporting period, the Department had statewide compliance with Consent Decree Paragraphs 5.a, 5.b, 5.c, 5.d, 8.b, 8.c, and 9.c.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Patrick J. Kemp, P.E.

Commissioner

Alaska Dept. of Transportation and Public Facilities

2/21/13
[Date]

Introduction

The following Alaska Department of Transportation and Public Facilities (DOT&PF) Clean Water Act Consent Decree 2012 Annual Report is prepared in accordance with Paragraph 9.c of the Decree.

The 2012 Annual Report is contained in the attached electronic files:

- Statewide 2012 Introduction and Summary
- Northern Region 2012 Annual Report
- Central Region 2012 Annual Report
- Southeast Region 2012 Annual Report
- Public Facilities 2012 Annual Report

The 2012 Annual Report will first address items at a Statewide level, including background on the Department's accomplishments, copies of any modified Inspection Report Forms and modified Delayed Action Item Report (DAIR) Forms per Paragraphs 9.c.(3) and (4), the current Alaska Certified Erosion and Sediment Control Lead (AK-CESCL) Course outline per Paragraph 9.c.(5), a list of Department-sponsored AK-CESCL trainings per Paragraph 9.c.(6), and an overall discussion and summary of the findings of this Report.

The Department has three Regions (Northern, Central and Southeast), and a Statewide Public Facilities Section, which separately maintain records for Active Projects under their jurisdiction. Therefore, a large portion of the 2012 Annual Report is arranged by these four functional units to address three of the seven required items. These are:

1. Annual Report of Non-Compliance with the Terms of the Consent Decree, per Paragraph 9.c.(1)
2. Annual Report of Active Projects, per Paragraph 9.c.(2)
3. Copies of all Delayed Action Item Report Forms for all Active Projects, per Paragraph 9.c.(7)

Each Regional Director and the Chief of the Statewide Public Facilities Section have the authority for projects under their jurisdiction and have certified their Region's report.

The worksheet used to report Active Projects differs slightly in format from the Consent Decree Appendix F. The revised worksheet contains all the information listed on the worksheet in Appendix F, and was first used in the 2010 Annual Report after obtaining approval from Kristine Karlson, NPDES Compliance Officer, in January 2011.

Background

In this reporting year, the Regional Stormwater Specialists and Headquarters staff continued to hold meetings to facilitate consistent statewide practices and improve compliance. Maintenance and Operations environmental staff have begun to attend as well.

This year, the Department continued to provide training opportunities for its Stormwater Specialists and contractor staff. As with last year, the Department hired a consultant to work with key staff members from the Regions and Headquarters to review and evaluate the Department's compliance program through a hands-on field audit of two active project sites. This field review occurred in August 2012, and was attended by approximately 25 Department and Contractor staff. In addition, we invited two construction engineers from another state agency, the Department of Natural Resources, to join the review as a training opportunity for them. After the field review, a presentation of recommendations was held in the regional office. It was attended by design engineers, construction managers, and environmental staff.

The Department coordinated with the Associated General Contractors (AGC) of Alaska to present a day-long training workshop to contractors regarding decree and permit requirements, with a focus on avoiding common paperwork errors that result in non-compliance. This workshop was presented in Juneau, Anchorage and Fairbanks, and was attended by about 50 total individuals.

There were also a number of stormwater trainings held for department employees. The Statewide Public Facilities division, in conjunction with Headquarters, provided their Project Engineers with training on the decree in March 2012, as a refresher to the decree training given 2 years ago. In August 2012, the Stormwater Specialist from Headquarters also conducted a field review of one of the Public Facilities Active Projects and three of the Northern Region Active Projects on the Dalton Highway to assist them with on-the-ground issues and stormwater documentation. The Central Region provided an all day workshop on various storm water and soil stabilization topics for their construction staff in March. This workshop, referred to as the Central Region Environmental Expo, was attended by 106 individuals.

The Department continues supporting employees who want to obtain professional certification in the field of erosion control. The Certified Inspector of Sediment and Erosion Control (CISEC) certification program continues to be offered in Alaska. Two classes were offered in April 2012; one in Anchorage and one in Fairbanks. The availability of the program in Alaska has been maintained, in part, due to a Department employee who has been a qualified CISEC Instructor since April 2011. As a result of ongoing course offerings, there are 70 people certified as CISEC, 30 of which are DOT&PF employees.

The Department continues to support training expenditures to keep its storm water staff current on changes in the industry. The Department sent six employees to the 2012 annual four-day Environmental Connection conference sponsored by the professional organization International Erosion Control Association (IECA), held in Las Vegas, Nevada. This does not include the Department employee sent to the IECA annual conference by CISEC, Inc. to teach their course and administer the certification exam.

In addition, the Department has participated in meetings dealing with stormwater and other important water quality regulations. A Department representative participated in the 2012 National Stormwater Practitioners Meeting, hosted by the American Association of State Highway Transportation Officials

(AASHTO), sub-titled “Connecting the DOTs through Collaboration in Stormwater Management.” This meeting was held in Raleigh, North Carolina between June 18 and 21. The Department also sent a representative to all six of the two-day meetings held through 2012 of a Work Group formed by the Department of Environmental Conservation to consider how to address developing final antidegradation implementation methods.

A workgroup of design, construction and maintenance staff was formed this past year to review documents developed by a consultant to update the storm water BMPs. These documents will be completed in the next year.

The University continues to administer the AK-CESCL training program through an Educational Services Agreement, with continued oversight by an interagency steering committee. The AK-CESCL Steering Committee applied for a grant to produce training videos that are filmed in Alaska. Unfortunately, the funding was not available for the grant application, but the Committee is continuing to look for ways to improve the training so that it is most relevant to Alaskan projects. The Steering Committee also revised the workbook to improve its readability, which is handed out to trainees in all courses.

Inspection Report Form and Delayed Action Item Report Form

During this reporting period, the Inspection Report Form (Form 25D-100) for the Annette Bay Ferry Terminal Project (AKR12A007) was revised to have the definition for storm event crossed-out since the definition provided corresponds with that in the Alaska DEC’s CGP and this project is covered under the EPA’s CGP, which has a different definition for storm event. However, this revision did not meet the definition of a modification as defined in Decree Paragraph 7.d.

There were no instances concerning modifications of the Delayed Action Item Report Form (Form 25D-113) as defined in Decree Paragraph 8.c.

Alaska Certified Erosion and Sediment Control Lead (AK-CESCL) Training

Below is the list of dates and locations of all DOT&PF-sponsored AK-CESCL Trainings in 2012, per Decree Paragraph 9.c.(6). In addition to the DOT&PF-sponsored courses, approximately 29 courses were offered by other entities.

Dates	Location (City)
March 14 – 15, 2012	Fairbanks, AK
March 27 – 28, 2012	Juneau, AK
April 3 – 4, 2012	Fairbanks, AK
April 16 – 17, 2012	Anchorage, AK
April 25 – 26, 2012	Sitka, AK
June 7 – 8, 2012	Nome, AK
October 24 – 25, 2012	Juneau, AK

The outline of the current AK-CESCL course follows on page 5 per Paragraph 9.c.(5). The outline has not changed in the past year.

AK-CESCL Course Outline

Revised October 2011

Course Elements:

Module I. Erosion and Sedimentation Impacts

- A. Examples/Case studies

Module II. Erosion and Sedimentation Processes

- A. Definitions
- B. Types of erosion
- C. Sedimentation
 - 1. Basic settling concepts
 - 2. Problems with clays/turbidity

Module III. Factors Influencing Erosion Potential

- A. Soil
- B. Climate
- E. Vegetation
- F. Topography

Module IV. Regulatory Requirements

- A. Federal, state, MS4, and local requirements and permits
- B. Other regulatory requirements
- C. DEC Wastewater Disposal General Permit – Excavation Dewatering
- D. Water Quality Standards
- E. The most current version of the Department of Environmental Conservation APDES General Permit for Storm Water Discharges from Construction Activities

Module V. Inspections/Monitoring/Recordkeeping

- A. Site Inspections
 - 1. CGP Inspection Frequency
 - 2. Scope of Inspection
 - 3. Inspection Reports
- B. Monitoring
- C. Recordkeeping
 - 1. Corrective Actions and Corrective Action Log
 - 2. Grading and Stabilization Log
 - 3. SWPPP Modifications/Amendment Log
 - 4. Site Map/Plan Sheets

Module VI. Storm Water Pollution Prevention Plan (SWPPP) Introduction

- A. Purpose/Objectives of a SWPPP
- B. Required Elements
- C. BMPs

Module VII. ACGP Required Control Measures

- A. Erosion Control
 - 1. Delineation of Site
 - 2. Minimize Amount of Exposed Soil during Construction Activity
 - 3. Maintain Natural Buffer Areas
 - 4. Control Stormwater Discharges and Flow Rates
 - 5. Protect Steep Slopes
- B. Sediment Control
 - 1. Storm Drain Inlet Protection Measures
 - 2. Water Body Protection Measures
 - 3. Down-Slope Protection Measures
 - 4. Stabilized Vehicle Construction Access & Exit Points
 - 5. Dust Generation and Track-out from Vehicles
 - 6. Soil Stockpiles
 - 7. Authorized Non-storm Water Discharges
 - 8. Sediment Basins
- C. Dewatering
- D. Soil Stabilization
- E. Treatment Chemicals
- F. Prohibited Discharge
- G. Good Housekeeping
- H. Spill Notification
- I. Permanent Storm Water Management Control
- J. Winter Considerations
- K. Maintenance of Control Measures

Description of Training:

The AK-CESCL course is a two-day course.

At the end of the course, a written exam is given. To be certified, a trainee must attend the course and pass the exam with at least a 70 percent score.

Certification is valid for three years.

Discussion

There are a few instances which the Department would like to recognize, though they do not constitute Decree noncompliance.

There were two instances in which a Delayed Action Item Report (DAIR) Form was completed but the reason for the delay was found to be *not* impracticable. Consequently, these DAIR Forms are not included in the Report per Paragraph 9.c.(7), and the instances were reported as not compliant with paragraph 8.a. The following table provides information for each of these instances to assist with locating them on the Non-compliance Worksheets provided in the Regional reports.

Project Name	Region	Date Non-Compliance Began	Date of Return to Compliance	Applicable Decree Paragraph
Girdwood Streets and Drainage Improvements	Central	6/6/2012	6/7/2012	8a
Richardson Highway Flood Repairs	Northern	7/6/2012	7/13/2012	8a

Table 1. DOT&PF Projects, by Region, for which a Delayed Action Item Report (DAIR) was completed, but resulted in non-compliance with the Consent Decree because the delayed actions were practicable to complete on time. The dates and applicable Consent Decree Paragraph reported in the Regional Non-Compliance Worksheets are provided for reference.

There were also a number of DAIR Forms included in the Regional reports that were completed in an untimely manner but were still prepared in order to comply with the requirements in Paragraphs 8.a. and 8.b. The instances of this have decreased from thirteen in 2011 to three in 2012, as more training on forms has been conducted.

Summary

Tables 2 and 3 provide a summary of the two worksheets included in this report. Table 4 provides a three year comparison of non-compliance by decree paragraph and Region. The Department would like to take this opportunity to highlight some of the positive trends from these data.

As shown in Table 3, the Department had statewide compliance with Paragraphs 5 .a, 5.b, 5.c, 5.d, 6.c, 8.b, 8.c, and 9.c, during the 2012 reporting period, several of which the Department was compliant with since the decree became effective. There have been no modifications to either the Inspection Report or Delayed Action Item Report forms in this reporting period. The AK-CESCL Training Program continues to be successful, given the low number of non-compliances with Paragraph 5.a.

Over the course of the first two full reporting years, there has been a 38 percent decrease in the total non-compliances statewide though there has been relatively little change (5.1 percent decrease) in the number of Active Projects (Table 4). This is also promising given that the 2012 reporting period was the first full year in which Department projects were subject to the requirements in the new ADEC 2011 Construction General Permit (CGP). Under new permit requirements, projects in coastal areas receiving an average annual precipitation of 40 inches or more were required to inspect twice every seven calendar days during periods of continuous rain. Due to this requirement, Southeast Region had more than doubled the number of inspections though they had nearly the same number of projects. Even with more frequent inspections, the Region had a 53.8 percent decline in the total number of non-compliances with Decree Paragraphs 7.b and 7.c.

From 2011 to 2012, there has been a 37 percent decrease in non-compliances with decree paragraph 8.a. The average number of days late for these non-compliances was about 4 days for both years. In 2011, the number of days a corrective action was late ranged from one to thirteen days, with most instances being four days late. In 2012, the number of days a corrective action was late ranged from one to ten days, with most instances being two days late. This shows that project staff are improving the promptness in which corrective actions are completed.

	Active Projects	Instances of Non-Compliance
Total Statewide	95	251
Northern	3	85
Central	37	83
Southeast	14	51
Public Facilities	5	32

Table 2. The Department's total number of Active Projects and instances of non-compliance with the Consent Decree, both statewide and by Region for the 2012 reporting year.

Applicable Paragraph	Number of Incidences
5 – Training	
5a – Training for DOT&PF	0
5b – Training for Contractors	0*
5c – Modification of AK-CESCL Training Program	0*
5d – Equivalent AK-CESCL Certification	0*
6 – Construction and SWPPP Requirements	
6a – SWPPP	0
6a1 – SWPPP Preparer’s Name	0*
6a2 – DOT&PF Project Engineer SWPPP Certification	5
6a3 – SWPPP Amendments	11
6a4 – Availability of SWPPP documents	1
6b – BMP Manual Citations	29
6c – Seasonal Stabilization	1
7 – Inspection Program	
7a – Pre-construction Inspections	1
7b – Inspections	41
7c – Inspection Reports	0
7c1 – Inspection Date	4
7c2 – Inspector Qualifications	57
7c3 – Scope of Inspection	0
7c4 – Weather/ Discharges since Last Inspection	31
7c5 – Weather/ Discharges during Inspection	2
7c6 – Location of Discharges	0*
7c7 – Location of BMP(s) Requiring Maintenance	1
7c8 – Location of BMP(s) that Failed	0*
7c9 – Location of Additional BMP(s) Needed	2
7c10 – BMP Action Items and Complete-by Date	23
7c11 – Certification by Project Engineer and Superintendent	19
8 – Project Maintenance	
8a – Deadline for Completing Action Items	17
8b – Delayed Action Item Report	0
8c – Modifications to Delayed Action Item Report	0*
9 – Reporting	
9a – Endangerment Reports	4
9b – Notices of Intent	2
9c – Annual Report	0*
TOTAL	25

Table 3. The Department’s total statewide instances of non-compliance with the Consent Decree by applicable Paragraph for the 2012 reporting year. Those items that did not result in any non-compliance since the effective date of the decree are noted with an asterisk (*).

Of the Department's total of 251 instances of non-compliance, 151 (or 60.2 percent) of these instances are inconsequential, as they do not impact the Department's ability to protect water quality. This includes instances reported under Paragraphs 6.a, 6.b, and 7.c, each are addressed below.

The Storm Water Pollution Prevention Plan (SWPPP) components as outlined in Paragraphs 6.a and 6.b resulted in 40 reported noncompliance instances. The eleven noncompliance instances reported under Paragraph 6.a.(3) (AK-CESCL approval of SWPPP Amendments) are inconsequential because none of these instances resulted from a non-qualified (AK-CESCL or equivalently certified) individual approving amendments. Furthermore, ten of these instances were for amendments that did not involve BMPs, but only paperwork updates, such as updating site maps, naming the individuals serving as the Contractor's SWPPP Manager or Superintendent, or incorporating permits. One instance resulted from an AK-CESCL certified individual simply failing to provide their certification information in the SWPPP prior to approving several amendments.

Lack of a BMP Manual citation in the SWPPP as required by Paragraph 6.b accounts for 29 of these instances. Good Housekeeping and other procedural BMPs are most often lacking a reference accounting for 20 of the total instances. Some contractors have interpreted the manual citation requirement to apply only to structural BMPs. Good Housekeeping BMPs are typically described well in the SWPPP and include many practices that are common on Department projects. Since this is one of the more common non-compliances, the Department has made every effort to address this requirement through our various training opportunities previously described. This year, there has been a 68 percent decrease from non-compliances with Paragraph 6.b reported in 2011 (Table 4).

Of the Department's total of 140 instances of non-compliance with inspection report requirements in Paragraphs 7.c, approximately 112 are the result of simple human error, and are not instances that were detrimental to water quality. Such common human errors include providing an incorrect AK-CESCL number or expiration date, missing one or more of the required pieces of information on weather and/or storm events, and overlooking boxes that need to be checked on the inspection report.

For all 57 instances of non-compliance with Paragraph 7.c.(2), the individuals held current AK-CESCL, or equivalent, certification though there were errors with reporting the required information of the inspectors. Common clerical errors in transcribing the certification number and/or expiration date include: 1) not providing the two or three letter code for the issuing agency as part of an AK-CESCL certification; 2) adding or leaving off zeros in the certification number; 3) forgetting to change all or part of the certification information when a new individual inspects. This year, many individuals began utilizing their CISEC certifications, which led to four instances of non-compliance. There was confusion about CISEC expiration dates among certified individuals, since CISEC, Inc. does not provide the expiration date on the issued certificates and did not originally provide this information on their website. The Department contacted CISEC, Inc. for clarification on the matter and learned that the expiration date was provided in the contract paperwork. The Department immediately began making CISEC-certified individuals aware of this and requesting that they provide copies of the contract, along with the certificate, in the SWPPP for reference. The Department also made the recommendation to CISEC, Inc. that the certification information provided online include expiration dates, for easy reference. CISEC, Inc. has recently modified their website to include this information. While non-compliances with 7.c.(2) continue to be the most widespread error, inspectors are becoming more diligent about ensuring their certification information is correctly provided, resulting in a 46 percent decrease from 2011 to 2012 in non-compliance with Paragraph 7.c.(2).

Another common recordkeeping error resulting in non-compliance is missing or inaccurately reporting information regarding weather or storm events since the last inspection on the inspection reports. This type of non-compliance occurred 31 times. These non-compliances result from errors such as not reporting storm events on the inspection report that are documented in the rain log, failing to provide or inaccurately providing one or more of the required pieces of information regarding a storm event, or failing to complete the weather section of the inspection report. The adoption of the 2011 APDES Construction General Permit definition of storm event has facilitated consistency, but it takes time for staff to adapt to a new procedure, evidenced by only an 11 percent decrease in these non-compliances. In all of these cases, the required information for the storm event could be obtained from the rain log in the SWPPP.

There were 23 instances of non-compliance with decree paragraph 7.c.(10). Of these, nine instances of noncompliance resulted from inspectors forgetting to mark a “yes” or “no” box to indicate whether a BMP is installed or whether a BMP requires action, four resulted from accidentally checking “yes” in the column indicating that a corrective action was needed, which includes instances that resulted from the inspectors not deleting information from a previous inspection when completing the inspection report. This type of omission is understandable given the large number of BMPs that may be installed across a project. It is most likely that the BMP was inspected and did not require action because the inspectors develop a routine for their inspection route and would have written an entry in the appropriate column of the report to describe the action and/or would have listed the action in the Corrective Action Log. However, since the inspection report lacks documentation for it, the Department continues to report these cases as noncompliance with 7.c.(10). The remaining ten instances reported as non-compliant with paragraph 7.c.(10) were due to the inspectors forgetting to provide the complete-by date or the description of the corrective action needed, but in most cases, the action needed was completed on-time, within an average of 4.5 days.

Applicable Paragraph	Number of Instances			% change in # from 2011 to 2012
	2010	2011	2012	
5 - Training				
5a – Training for DOT&PF	0	2	0	-100.00%
5c – Mod. of AK-CESCL Program	0	0	0	0.00%
5d – Equivalent AK-CESCL Certification	0	0	0	0.00%
6 – Construction and SWPPP Requirements				
6a – SWPPP	0	0	0	0.00%
6a1 – SWPPP Preparer’s Name	0	0	0	0.00%
6a2 – DOT&PF SWPPP Certification	0	4	5	25.00%
6a3 – SWPPP Amendments	5	14	11	-21.43%
6a4 – Availability of SWPPP	0	0	1	
6b – BMP Manual Citations	22	91	29	-68.13%
6c – Seasonal Stabilization	0	0	1	
7 – Inspection Program				
7a – Pre-construction Inspections	0	1	1	0.00%
7b - Inspections	7	30	41	36.67%
7c – Inspection Reports	2	4	0	-100.00%
7c1 – Inspection Date	0	0	4	
7c2 – Inspector Qualifications	23	106	57	-46.23%
7c3 – Scope of Inspection	8	2	0	-100.00%
7c4 – Weather/ Discharges since Last Inspection	21	35	31	-11.43%
7c5 – Weather/ Discharges during Inspection	3	1	2	100.00%
7c6 – Location of Discharges	0	0	0	0.00%
7c7 – Location of BMP(s) Requiring Maintenance	2	19	1	-94.74%
7c8 – Location of BMP(s) that Failed	0	0	0	0.00%
7c9 – Location of BMP(s) Needed	0	4	2	-50.00%
7c10 – BMP Action Items and Complete-by Date	9	41	23	-43.90%
7c11 – Certification by Project Engineer and Superintendent	21	22	19	-13.64%
8 – Project Maintenance				
8a – Deadline for Completing Action	8	27	17	-37.04%
8a – Deadline Selection Requirements	0	1	0	-100.00%
8b – Delayed Action Item Report	0	1	0	-100.00%
8c – Modifications to DAIR	0	0	0	0.00%
9 – Reporting				
9a – Endangerment Reports	0	1	4	300.00%
9b – Notices of Intent	0	3	2	-33.33%
9c – Annual Report	0	0	0	0.00%
TOTAL	131	409	251	38.63%

Table 4. The Department’s total statewide instances of non-compliance with the Consent Decree by applicable Paragraph with the percent change between 2011 and 2012 shown. Numbers reported for 2011 may be different than those reported in the 2011 Annual Report, as this table accounts for instances reported in the 2011 Annual Report Supplement as well.